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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/476,686	12/30/1999	GEOFFREY B. RHOADS	60081	8157

23735 7590 10/04/2004

DIGIMARC CORPORATION  
9405 SW GEMINI DRIVE  
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EXAMINER

SONG, HOSUK

ART UNIT

PAPER NUMBER

2135

DATE MAILED: 10/04/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)
	09/476,686	RHOADS ET AL.
	Examiner Hosuk Song	Art Unit 2135

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

1)  Responsive to communication(s) filed on 26 January 2004.

2a)  This action is **FINAL**.                            2b)  This action is non-final.

3)  Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## **Disposition of Claims**

4)  Claim(s) 1-18 and 23-43 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5)  Claim(s) \_\_\_\_\_ is/are allowed.

6)  Claim(s) 1-18 and 23-43 is/are rejected.

7)  Claim(s) \_\_\_\_\_ is/are objected to.

8)  Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

9)  The specification is objected to by the Examiner.

10)  The drawing(s) filed on \_\_\_\_\_ is/are: a)  accepted or b)  objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)  The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a)  All b)  Some \* c)  None of:  
1.  Certified copies of the priority documents have been received.  
2.  Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3.  Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1)  Notice of References Cited (PTO-892)  
2)  Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3)  Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 9.  
4)  Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_ .  
5)  Notice of Informal Patent Application (PTO-152)  
6)  Other: \_\_\_\_ .

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

1. Claims 27-40 remain rejected under 35 U.S.C. 102(e) as being anticipated by Bottum(US 6,014,569).

Claim 27: Bottum patent discloses receiving ambient music using a microphone in a user device in (fig.2 and col.3,lines 21-23,64-65). Bottum discloses transferring electronic signals corresponding to the received ambient music to a processor and using an identifier to obtain information from a database the information relating to the music in (col.3,lines 54-67;col.6,lines 27-37). Bottum discloses presenting at least textual information to a user about the ambient music, presented information being based at least in part on information obtained from the database in (col.6,lines 27-37).

Claims 28-31: Bottum discloses textual information presented to the user specifies the artist and title of the ambient music in (col.4,lines 64-65;col.5,lines 10-15).

Claim 32: Bottum discloses textual information identifies packaged media on which the music is available in (col.6,lines 4-11).

Claim 33: Bottum discloses user device includes a display, and the textual information is presented to the user on display in (col.4,lines 64-67;col.5,lines1-8).

Claim 34: Bottum discloses triggered by a user action including pressing a button on the user device in (col.5,lines 4-10).

Claim 35: Bottum discloses triggered by a voice command of the user,acted upon by a voice recognition feature of the user device in (col.4,lines 7-10).

Claim 36: Bottum discloses device is portable sized to carry in a user's pocket in (col.4,lines 17-19 and fig.1,2).

Claim 37: Bottum discloses transmitting data from the user device to a remote computer, data including user/device data relating to at least one of the following: user name, audio delivery information, user age, user gender, model of user device, device UID, or user UID; wherein the text presented to the user is dependent, at least in part on transmitted user/device data in (col.3,lines 54-58; col.4,lines 64-65; col.6,lines 4-11).

Claim 38: Bottum discloses user device has wireless transmit and receive capabilities in (fig.1 and col.4,lines 17-24).

Claim 39-40: Bottum discloses wireless device has a store-and-forward capability, wherein ambient music can be stored and later identified if wireless service is not available at the time when the ambient music is received by microphone in (col.4,lines 27-34,34-48).

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claim 1 remain rejected under 35 U.S.C. 102(b) as being anticipated by Indeck et al.(US 5,740,244).

Claims 1: Indeck patent discloses a transducer to receive ambient audio and to output electrical signals corresponding in (col.9,lines 57-60 and col.10,lines 8-15). Indeck disclose a watermark detector coupled to the transducer for producing payload information by extracting a digital watermark embedded in the electrical signals corresponding to the ambient audio in

(col.6,lines 14-32 and col.10,lines 31-67;col.11,lines 1-3). Indeck disclose a memory storing user identification information in (col.7,lines 38-40). Indeck disclose an interface that receives at least some of both the payload information and the user identification information for transmission to a relay station in (col.5,lines 21-34).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable by Moskowitz(US 6,205,249).

Claim 9: Moskowitz disclose stenographically encoding audio with a plural-bit binary watermark payload in (col.6,lines 15-43). Moskowitz does not specifically disclose payload comprises a Digital Object Identifier. Official notice is taken that DOI is well known in the art. One of ordinary skill in the art would have been motivated to use DOI in order to uniquely identify sensitive data thus minimizing data compromise and data mishandling.

4. Claims 5-8,10,15-18, 41-43 remain rejected under 35 U.S.C. 103(a) as being unpatentable by Bottum (US 6,014,569).

Claim 5: Bottum discloses receiving audio at a device in (col.2,lines 25-28). Bottum discloses discerning from the audio a plural bit audio ID in (col.6,lines 27-41). Bottum discloses obtaining a user ID from a memory in the device in (fig.3#360). Bottum does not specifically

disclose transmitting at least portions of both the audio and the user ID to a location remote from device. It would have been obvious to person of ordinary skill in the art at the time invention was made to modify the invention of Bottum to transmit portion of audio and user ID so that if the data is compromised by the hackers, hacker is able to gain only the portion of the data rather than full data thus security is greatly enhanced by transmitting only a portion of the data.

Claim 6: Bottum discloses audio ID comprises a Digital Object Identifier in (col.3,lines 59-61).

Claim 7: Bottum does not specifically disclose receiving the audio by a microphone. Official notice is taken that receiving the audio by a microphone is well known in the art. One of ordinary skill in the art would have been motivated to receive the audio by a microphone in order to capture the external audio information into the system.

Claim 8: Bottum discloses discerning at least two IDs from the audio, one being the audio ID (col.2,lines 22-23), and another being an ID corresponding to an environment in which the device is located in (col.1,lines 25-30 and col.3,lines 54-59).

Claims 41- 43: Bottum does not specifically discloses act of processing the transferred electronic signals to generate the identifier and is performed in the user device and processing composing decoding a watermark. Examiner takes Official notice that encoding and watermarking is well known in the art. One of ordinary skill in the art would have been motivated to use watermarking method in order to protect copyright material or sensitive data from the intruders. Watermarking enhances data integrity and offers copy protection.

Claim 10: Bottum patent discloses signal having a plural bit location identifier encoded therein, and airing the signal through at least one loud speaker in an environment, the aired signal being generally indiscernible by human listeners present in the environment in (col.3,lines

21-61). Bottum does not specifically disclose generating a noise like signal. Official notice is taken that generating a noise like signal is well known in the art. Of ordinary skill in the art would have been motivated to generate noise like signal so that unauthorized parties can make the sensitive data impossible to detect by employing or adding noise like signal thus enhancing security of its data.

Claim 15: Bottum discloses receiving audio at a device in (col.2,lines 25-28). Bottum discloses discerning from the audio a plural bit audio ID in (col.6,lines 27-41). Bottum discloses obtaining a user ID from a memory in the device in (fig.3#360). Bottum's audio ID is decoded from the audio because (col.2,lines 18-31;col.5,lines 19-33;col.6,lines 26-41). Bottum does not specifically disclose transmitting at least portions of both the audio and the user ID to a location remote from device. It would have been obvious to person of ordinary skill in the art at the time invention was made to modify the invention of Bottum to transmit portion of audio and user ID so that if the data is compromised by the hackers, hackers is able to gain only the portion of the data rather than full data thus security is greatly enhanced by transmitting only a portion of the data.

Claim 16: Bottum discloses audio ID comprises a Digital Object Identifier in (col.3,lines 59-61).

Claim 17: Bottum does not specifically disclose receiving the audio by a microphone. Official notice is taken that receiving the audio by a microphone is well known in the art. One of ordinary skill in the art would have been motivated to receive the audio by a microphone in order to capture the external audio information into the system.

Claim 18: Bottum discloses discerning at least two IDs from the audio, one being the audio ID (col.2,lines 22-23), and another being an ID corresponding to an environment in which the device is located in (col.1,lines 25-30 and col.3,lines 54-59).

5. Claims 2-4,23-26 remain rejected under 35 U.S.C. 103(a) as being unpatentable over Indeck et al.(US 5,740,244) in view of Smith et al.(US 5,923,327).

Claims 2: Indeck discloses all the limitation above. Indeck does not disclose in which the interface is a wireless interface. Smith discloses a device including a transducer where interface is a wireless interface in (fig.2 and 4). It would have been obvious to person of ordinary skill in the art at the time invention was made to employ a wireless capability as taught in Smith with transducer device disclosed in Indeck in order for user to roam freely where user does not have to be physically connected to the system as well as having the capability of storing and forwarding electric signals, representative of voice,video, audio data or other forms of information to or from user in a wireless form who is mobile, in an efficient and convenient manner.

Claims 3-4,23-26: Indeck does not specifically disclose alphanumeric display with a keypad. Smith patent discloses device with alphanumeric display including a keypad in (fig.4). It would have been obvious to person of ordinary skill in the art at the time invention was made to include alphanumeric display with a key pad disclosed in Smith with a device taught in Indeck in order for user to conveniently send and receive data without having to rely on a second device to perform data transaction where it can be inconvenient and time consuming for the users. Further, alphanumeric display with a keypad provides user more freedom as to how data should be processed and handled at users discretion.

6. Claims 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Indeck et al.(US 5,740,244) in view of Fardeau et al(US 5,581,800).

Claim 11: Indeck patent discloses a transducer to receive ambient audio and to output electrical signals corresponding in (col.9,lines 57-60 and col.10,lines 8-15). Indeck disclose a watermark detector coupled to the transducer for producing payload information in (col.6,lines

14-32). Indeck disclose a memory storing user identification information in (col.7,lines 38-40). Indeck disclose an interface that receives at least some of both the payload information and the user identification information for transmission to a relay station in (col.5,lines 21-34). Indeck does not specifically disclose the processing system operable to detect an identifier of the ambient audio from the electrical signals. Fardeau disclose this limitation in (col.3,lines 45-55). It would have been obvious to person of ordinary skill in the art at the time invention was made to detect an identifier of the ambient audio from the electrical signals as taught in Fardeau with audio signals processing system of Indeck in order to in order to properly identify specific audio data from signals thus enhancing overall signal processing speed.

7. Claims 12-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Indeck et al.(US 5,740,244) in view of Fardeau et al(US 5,581,800) and further in view of Smith et al.(US 5,923,327).

Claim 12:Neither Indeck or Fardeau specifically disclose interface is a wireless interface. Smith discloses a device including a transducer where interface is a wireless interface in (fig.2 and 4). It would have been obvious to person of ordinary skill in the art at the time invention was made to employ a wireless capability as taught in Smith with transducer device disclosed in Indeck and Fardeau in order for user to conveniently conduct transaction without wires.

Claims 13-14: Neither Indeck or Fardeau specifically discloses alphanumeric display with a keypad. Smith patent discloses device with alphanumeric display including a keypad in (fig.4). It would have been obvious to person of ordinary skill in the art at the time invention was made to include alphanumeric display with a key pad disclosed in Smith with a device taught in Indeck and Fardeau in order for user to conveniently send and receive data without having to rely on a second device to perform data transaction where it can be inconvenient and time

consuming for the users. Further, alphanumeric display with a keypad provides user more freedom as to how data should be processed and handled at users discretion.

***Response to Applicant's arguments***

8. Claims 1-18,23-43 are pending. The previous grounds of claims 9-10,11-14 rejection are withdrawn in view of Applicant's arguments in the Amendment filed 1/26/2004. See new rejections above.

Applicant has argued that Bottum fails to teach or suggest "receiving from the processor an identifier derived from the electrical signals:. In response: Examiner disagrees. Bottum disclose this limitation in (col.5,lines 19-33 and col.6,lines 27-37).

Applicant has argued that Bottum's audio ID is not decoded from the audio. In response: Examiner disagrees. Bottum's audio ID is decoded from the audio because (col.2,lines 18-31;col.5,lines 19-33;col.6,lines 26-41) teaches audio ID is derived from the audio data in which audio ID comparison is made in order to properly authenticate and play audio data. This suggests that in order to extract audio ID, it must be decoded. Applicant has argued that Bottum does not teach discerning the audio ID from the audio. In response: Examiner disagrees. Bottum disclose discerning the audio ID from the audio in (col.6,lines 27-27-41).

***Conclusion***

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hosuk Song whose telephone number is 703-305-0042. The examiner can normally be reached on Tue-Fri from 6:00 am to 4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Vu can be reached on 703-305-4393. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

\*\* Please note of following changes starting 10/25/2004\*\*.

- a) New telephone number for TC 2100 receptionist is 571-272-2100.
- b) New contact number for Examiner is 571-272-3857
- c) New contact number for Examiner's supervisor is 571-272-3859.

HS

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